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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,203	11/25/2003	Markus Schmidt-Karaca	11884/407701	4988
53000 7590 05/01/2008 KENYON & KENYON LLP 1500 K STREET N.W. WASHINGTON, DC 20005				
EXAMINER				
HOANG, HIEU T				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,203

Applicant(s)

SCHMIDT-KARACA ET AL.

Examiner

HIEU T. HOANG

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the communication filed on 02/25/2008.
2. Claims 16 and 17 are new.
3. Claims 1-17 are pending and presented for examination.

Response to Amendment

4. The 35 U.S.C. 112 rejection of claims 10 and 12. See rationale in the U.S.C. rejection section below.

Response to Arguments

5. Applicant's arguments have been fully considered but are moot in view of new ground(s) of rejection.

Specification

6. The disclosure is objected to because of the following informalities. Claim 9 recites a computer-readable medium. However, no explicit definition of a computer-readable medium can be found in the specification. For examining purpose, the claimed computer-readable medium will be read as a storage device as in par. 1 of the Detailed Description. Appropriate correction is required.

Claim Objections

7. Claim 9 is objected to because of the same rationale given above in the specification objection. No explicit definition of a computer-readable medium can be found in the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-4, 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Consider claim 1, the claim recites storing at least one application descriptor, and the application descriptor maintains a complete representation of all distributed applications in the network. If one application descriptor maintains a complete representation of all distributed applications in the network, it is vague why there are multiple application descriptors in a same network. It is also vague which application descriptor the applicant is referring by reciting the application descriptor. Same rejection rationale applies to claim 12.

10. Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: although the claims are system claims, there is no explicit connection or relationship between the

components of the claims, e.g., between the server and the database. Appropriate correction is required.

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
12. Claims 1-4 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caufield et al. (US 2007/0177571, hereafter Caufield), in view of Chasman et al. (US 2007/0180075, hereafter Chasman), further in view of Kjellberg et al. (US 2003/0084165, hereafter Kjellberg).
13. For claim 1, Caufield discloses a method for representing a distributed software application comprising:
 - each computing device is associated with at least one resource ([0024] lines 1-7, [0028] lines 6-21, [0026], association between the user ID and device ID and components);
 - storing at least one application descriptor, wherein the application descriptor describes the association between each of the at least one computing device participating in the application and each of the respective resources ([0024] lines 1-7, [0028] lines 6-21, association between the user ID of the device and component or resources that the user device is allowed to synchronize with the server, [0026], user ID is associated with device ID);

providing access to the application descriptor in order to automatically configure the at least one computing device (fig. 2, [0024], abstract, meta-data relationship for roles, device, and component association for synchronizing or configuring the device).

Caufield does not explicitly disclose:

determining at least one distributed application in a network, the application including the collective behavior of at least one computing device;

However, Chasman discloses:

determining at least one distributed application in a network (fig. 4, update request message containing a business object type of sales opportunity for sales applications), the application including the collective behavior of at least one computing device (fig. 4, mobile device requesting update information or collective behavior);

Caufield-Chasman does not disclose providing access to the application descriptor in order to facilitate administration of the distributed software application; and the application descriptor maintains a complete representation of all distributed applications in the network.

However, Kjellberg discloses providing access to the application descriptor in order to facilitate administration of the distributed software application (fig. 1, [0026], application provisioning interface 280 connected to the descriptor database for provisioning or administration of distributed application).

the application descriptor maintains a complete representation of all distributed applications in the network ([0026], fig. 1, application descriptor database storing all application descriptors).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Caufield and Chasman and Kjellberg to utilize the role-device-component relationships of Caufield to authorize users and devices to access a particular data type in the synchronization process.

14. For claim 12, the claim is rejected for the same rationale as in claim 1.

15. For claims 2 and 13, the claims are rejected as in claims 1, 5, and 12. Caufield-Chasman-Kjellberg further discloses the application descriptor is stored at a network node, the network node performing administrative tasks with respect to the distributed application (Caufield, fig. 1, network server, distributing data by synchronization upon request).

16. For claims 3 and 14, the claims are rejected as in claims 1, 5, and 12. Caufield-Chasman-Kjellberg further discloses the application descriptor is used for at least one of configuration, deployment of the distributed application (Caufield, abstract, synchronization).

17. For claims 4 and 15, the claims are rejected as in claims 1 and 12. Caufield-Chasman-Kjellberg further discloses the distributed application is installed on a network including an application server, a middleware server and a mobile device (Caufield, fig. 1, application server, access server and mobile device).

18. For claims 16 and 17, the claims are rejected as in claims 1 and 12. Caufield-Chasman-Kjellberg further discloses the complete representation comprises respective resources required for all the distributed applications with respect to all participating devices (Kjellberg, fig. 1, [0026], application descriptor database for association of devices and application objects)

19. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chasman, in view of Caufield, further in view of Kjellberg.

20. For claim 5, Chasman discloses a method for representing a software application operating within a mobile environment, the mobile application including the collective behavior of a mobile device a middleware server and a backend server comprising:
specifying a behavior for the mobile device (fig. 4, receiving update request including user inputs at the device);

determining at least one first resource to be associated with mobile device, at least one second resource to be associated with the middleware server and at least one third resource to be associated with the backend server as a function of the specified behavior for the mobile device (fig. 4 and 7, [0024], [0031], identifiers for resources at the mobile device, the application server and the master database, after receiving the update request, determining resource or data to be synchronized by comparing the update request with the master database and send the synchronized data to the client device);

Chasman does not explicitly disclose:

storing an application descriptor, the application descriptor describing the association between the first resource, the second resource, the third resource and, respectively, the mobile device, the middleware server and the backend server;

However, Caufield discloses:

storing an application descriptor, the application descriptor describing the association between the first resource, the second resource, the third resource and, respectively, the mobile device, the middleware server and the backend server ([0024] lines 1-7, [0028] lines 6-21, [0026], association between the user ID and device ID and component or resources that the user device is allowed to synchronize with the master database)

Chasman-Caufield does not disclose the application descriptor maintaining a complete representation of all software applications in the mobile environment.

However, Kjellberg discloses the same ([0026], fig. 1, application descriptor database storing all descriptors for applications)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Chasman and Caufield and Kjellberg to utilize the role-device-component relationships of Caufield to allow users and devices to access a particular data type in the synchronization process.

21. For claim 6, the claim is rejected as in claim 5. Chasman-Caufield-Kjellberg further discloses the application descriptor is stored at a network node, the network node performing administrative tasks with respect to the distributed application (Caufield, fig. 1, network server, distributing data by synchronization upon request).

22. For claim 7, the claims are rejected as in claim 5. Chasman-Caufield-Kjellberg further discloses the application descriptor is used for at least one of configuration, deployment of the distributed application (Caufield, abstract, synchronization).

23. For claim 8, Chasman-Caufield-Kjellberg further discloses the at least one first resource, the at least one second resource and the at least one third resource are deployed to at least one of the mobile device, the middleware server and the backend server as a function of the application descriptor (Caufield, fig. 2, abstract, synchronizing application data between application server and mobile devices based on role-device-components association).

24. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kjellberg, in view of Chasman.

25. For claim 9, Kjellberg discloses a computer-readable medium storing thereon program instructions that, when executed, cause an executing device to form a data structure for representing a distributed software an application descriptor, the application descriptor storing a complete representation of all distributed applications existing in a network, the data structure including:

a first unique identifier for representing a software application distributed in the network ([0024] last 4 lines, [0025], a client software version is an software application ID);

at least one second unique identifier specifying at least one computing device (fig. 1, [0026], device profile database 240 storing device identifiers), wherein the second identifier is associated with the first unique identifier ([0026], fig. 1, application descriptor associated with the application and device profile);

at least one third unique identifier specifying at least one resource ([0029], application menu of available resources (objects and applications) for associated user and device profile);

an association between each of the at least one computing device and the at least one resource ([0026], application descriptor is accessed to determine which application or objects is associated with the device)

Kjellberg does not disclose explicitly that the at least one computing device to participate in the software application.

However, Chasman discloses the same (fig. 4, application version synchronizing request of a business object or application)

It would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Kjellberg and Chasman to synchronize the user device with the latest version of applications using out-of-date detection and conflict detection of Chasman.

26. For claim 10, Kjellberg discloses a system for administering a distributed software application including the collective behavior of a plurality of computing devices within a network comprising:

a server including a processor (fig. 1, provisioning server);

a database for storing at least one application descriptor (fig. 1, descriptor database 250), the at least one application descriptor representing an association between the distributed software application, computing devices and resources to be associated with the computing devices ([0026], application descriptor is accessed to determine which application or objects is associated with the device); and the at least one application descriptor maintains a complete representation of all distributed software applications in the network (fig. 1, descriptor database for all applications available).

at least one administrative module on the server, wherein the processor, utilizing the at least one administrative module and the at least one application descriptor, perform administration tasks for the application with respect to the computing devices ([fig. 1, application configuration interface 280 allows administration of software applications using application descriptor database 250, using device profile database 230)

Kjellberg does not disclose explicitly that the computing devices participating in the distributed software application.

However, Chasman discloses the same (fig. 4, application synchronizing request of a business object)

It would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Kjellberg and Chasman to synchronize the user device with the latest version of applications using out-of-date detection and conflict detection of Chasman.

27. For claim 11, the claim is rejected as in claim 10. Kjellberg-Chasman further discloses the administrative tasks include at least one of configuration, deployment, and updating of the distributed software application (Chasman, abstract, synchronization and updating, Kjellberg, fig. 1, item 270, deployment of distributed application).

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Pace et al. US 2003/0101223.

DaCosta et al. US 2002/0120725.

Johnson et al. US 2003/0120784.

29. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2152

HH

/Bunjod Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2152